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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,939	03/11/2004	Charles B. Worrick III	00216-664001 / Case 8134	8003

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EXAMINER

MICHALSKI, SEAN M

ART UNIT	PAPER NUMBER
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3724

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/799,939

Applicant(s)

WORRICK ET AL.

Examiner

Sean M. Michalski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,7-10,12,13,15,18-21 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,7-10,12,13,15,18-21 and 24-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 3, 7-10, 12, 13, 15, 18-21, and 24-26 rejected under 35 U.S.C. 103(a) as being unpatentable over Apprille'071 in view of Beresford-Jones in further view of Kirk (USPN 3,048,673).

Apprille'071 teaches a cartridge (#14 figure 1) with a blade unit including a housing (#16 figure 1) that carries one or more shaving blades (#18 figure 1), a handle (#30, figure 3) with a handle casing (#42, figure 3), an interconnect assembly disposed at an end of the handle casing (#26, figure 3), a release button comprising a button substrate (#54, figure 3) and a flexible canopy extending outwardly from the button substrate toward the handle casing (#50, figure 3). Apprille'071 further teaches that the edge of the canopy contacts the handle casing (#50 is in contact with #12, figures 16 & 17). Apprille'071 further teaches that the edge of the canopy contacts the handle casing when the button is in an unloaded position (#50 is in contact with #12, figures 16 & 17). Apprille'071 further teaches that the edge of the canopy contacts the handle casing when the button is in an actuated position (#50 is in contact with #12, figures 16 & 17). Apprille'071 further teaches that the edge of the canopy contacts the handle casing having an angle of no greater than 110 degrees. This is because the angle formed

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between the button and the handle casing varies and is at a maximum in the front center region of the canopy, which at no time is greater than 110 degrees (#50 is in contact with #12, figures 16 & 17). The angle between the canopy and the handle casing wall varies from about 50 degrees to about 110 degrees.

Beresford-Jones teaches a configuration of button for a marine environment. The teachings of Beresford-Jones would have recommended themselves to one engaged in solving the problem of making a toggle button for an application in which water would be present, such as in a wet shaver. The button of Beresford-Jones has a button substrate (10 figure 1) and a canopy (1 figure 1) which is designed to buckle (at 6 and 7 figure 1) during actuation. The free edge of the canopy (13 figure 1) contacts the housing (11 figure 1) in both the loaded and unloaded positions. The flexible canopy buckles when the substrate is moved towards the housing. Beresford-Jones also teaches towards having the free-end be unrestrained in its contact with the wall (11 figure 1). The canopy and the housing in Beresford-Jones are angled at 90 degrees.

The canopy contact angles in Aprille'071 or Beresford-Jones could be any angle between 0 and 360 as a matter of mechanical design choice, for example: if the housing 11 was not flat, concave either up or down, the contact angle would be varied accordingly. This modification is well within the ordinary level of skill in the art.

Regarding the limitation that the free edge of the canopy can move along the wall during actuation, this is a well known mode of operation and is an art recognized equivalent of having a fixed edge canopy, as seen in Kirk figure 3. Kirk shows a canopied button having a free end which moves along the wall during

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actuation. A person of ordinary skill in the art would have known that it was possible to make the free edge of a button canopy moveable in relation to a wall, since both configurations conceal the connecting assembly (the button substrate and associated mechanisms).

In the same field of problem solving endeavor it would have been obvious to one skilled in the art at the time of the invention to modify Aprille'071 by using a toggle button with a flexible canopy and substrate, having a free end, and being configured to buckle during actuation, and return to an unbuckled position after actuation as taught by Beresford-Jones and to allow the canopy to move along the wall during actuation. The motivation to combine is that the button configuration is waterproof (which is desirable), and conceals the connecting assembly (9 figure 1).

Regarding claims 25 and 26, Aprille'071 in view of Beresford-Jones further in view of Kirk does not teach that the canopy be between .3 and .6 mm thick, however this limitation lacks criticality. The specification merely states this range as follows: "The thickness of the canopy can be between about 0.3 mm and 0.6 mm". No reason or rationale is provided, nor is the limitation of between .3 and .6 mm in any way essential to the function of the canopy which is to conceal the connecting assembly. A thickness of .1mm or 1mm would conceal just as effectively.

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Alternatively, it would have been obvious to provide the canopy with a thickness of between 0.3mm and 0.6mm because it has been held that it is routine in the art to discover an optimum value of a result effective variable.

2. Claims 12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Aprille'071 in view of Beresford-Jones in further view of Kirk as applied to claims 1 and 13 above and further in view of Jones et al. (USPN 6,898,855).

Jones et al teaches the use of thermoplastic elastomer in buttons for gripping by the hand. (Col. 8 lines 1-5). It would have been obvious to one skilled in the art at the time of the invention to use thermoplastic elastomer, since it has been known to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious mechanical design expediency. *In re Leshin*, 125 USPQ 416. The motivation to combine is to provide a more ergonomic grip as disclosed in Jones et al. (col. 4 lines 5-15).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean M. Michalski whose telephone number is 571-272-6752. The examiner can normally be reached on M-F 7:30AM - 3:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


SMM
BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER